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| APPLICATION NO.            | FILING DATE                         | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------------|-------------------------------------|----------------------|---------------------|------------------|
| 10/539,693                 | 06/16/2005                          | Michael Haacke       | DE 020331           | 6552             |
| 24737 ·                    | 7590 07/10/2007<br>ELLECTUAL PROPER | EXAMINER             |                     |                  |
| P.O. BOX 300               | 1                                   | WILLIAMS, JOSEPH L   |                     |                  |
| BRIARCLIFF MANOR, NY 10510 |                                     | . ART UNIT           | PAPER NUMBER        |                  |
|                            |                                     |                      | 2879                |                  |
|                            |                                     |                      | MAIL DATE           | DELIVERY MODE    |
|                            |                                     |                      |                     |                  |
|                            |                                     |                      | 07/10/2007          | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|  |   |   | ·   | TH          |  |  |  |
|--|---|---|---|-------------|--|--|--|
|  |   | Application No.   | Applicant(s)  |             |  |  |  |
|  |   | 10/539,693  | HAACKE ET AL.   |             |  |  |  |
| Office Action Summary  |   | Examiner  | Art Unit  |             |  |  |  |
|  |   | Joseph L. Williams  | 2879  |             |  |  |  |
| Period fo  | The MAILING DATE of this communication or Reply   | appears on the cover sheet w  | ith the correspondence add  | ress        |  |  |  |
| A SH<br>WHIC<br>- Exte<br>after<br>- If NC<br>- Failu<br>Any | ORTENED STATUTORY PERIOD FOR RECHEVER IS LONGER, FROM THE MAILING ensions of time may be available under the provisions of 37 CFI SIX (6) MONTHS from the mailing date of this communication of period for reply is specified above, the maximum statutory perior to reply within the set or extended period for reply will, by streply received by the Office later than three months after the model patent term adjustment. See 37 CFR 1.704(b). | G DATE OF THIS COMMUNI R 1.136(a). In no event, however, may a . riod will apply and will expire SIX (6) MOI atute, cause the application to become A | CATION. reply be timely filed  NTHS from the mailing date of this con BANDONED (35 U.S.C. § 133). |             |  |  |  |
| Status   |   |   |   |             |  |  |  |
| 1)  🔀  | Responsive to communication(s) filed on 1   | 7 April 2007  |   |             |  |  |  |
| •  |   | This action is non-final.   |   |             |  |  |  |
| ,  | Since this application is in condition for allo   |   | ters, prosecution as to the   | merits is   |  |  |  |
| -,   | closed in accordance with the practice und  | •   |   |             |  |  |  |
| Disposit   | ion of Claims   |   |   |             |  |  |  |
| 4)🖂  | Claim(s) 1,2 and 4-9 is/are pending in the a  | application.  |   |             |  |  |  |
| •  | 4a) Of the above claim(s) is/are withdrawn from consideration.  |   |   |             |  |  |  |
| 5)   | Claim(s) is/are allowed.  |   |   |             |  |  |  |
| 6)⊠  | Claim(s) 1,2 and 4-9 is/are rejected.   |   |   |             |  |  |  |
| 7)   | Claim(s) is/are objected to.  |   |   |             |  |  |  |
| 8)□  | Claim(s) are subject to restriction ar  | nd/or election requirement.   |   |             |  |  |  |
| Applicat   | ion Papers  |   |   |             |  |  |  |
| 9)   | The specification is objected to by the Exan  | niner.  |   |             |  |  |  |
| -  | 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  |   |   |             |  |  |  |
|  | Applicant may not request that any objection to   | the drawing(s) be held in abeya   | nce. See 37 CFR 1.85(a).  |             |  |  |  |
|  | Replacement drawing sheet(s) including the co   | rrection is required if the drawing   | g(s) is objected to. See 37 CFI   | R 1.121(d). |  |  |  |
| 11)  | The oath or declaration is objected to by the   | e Examiner. Note the attache  | d Office Action or form PT0   | O-152.      |  |  |  |
| <b>Priority</b>  | under 35 U.S.C. § 119   |   |   |             |  |  |  |
| •—   | Acknowledgment is made of a claim for fore ☐ All b)☐ Some * c)☐ None of:  | eign priority under 35 U.S.C.   | § 119(a)-(d) or (f).  | ٠.          |  |  |  |
|  | 1. Certified copies of the priority docum   | nents have been received.   |   |             |  |  |  |
|  | 2. Certified copies of the priority docum   | nents have been received in A   | Application No  |             |  |  |  |
|  | 3. Copies of the certified copies of the papelication from the International Bu   | •   | n received in this National S   | Stage       |  |  |  |
| * (  | See the attached detailed Office action for a   |   | t received.   |             |  |  |  |
|  |   |   |   |             |  |  |  |
| Attachmer  | nt(s)   |   |   | ,           |  |  |  |
|  | ce of References Cited (PTO-892)  | • -   | Summary (PTO-413)   |             |  |  |  |
| - =  | ce of Draftsperson's Patent Drawing Review (PTO-948 mation Disclosure Statement(s) (PTO/SB/08)  |   | (s)/Mail Date Informal Patent Application   |             |  |  |  |
|  | er No(s)/Mail Date 6/07   | 6) Other:   |   |             |  |  |  |

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#### DETAILED ACTION

The amendment and response filed on 17 April 2007 has been entered.

### Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, and 4-9 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Haacke et al. (US 6,815,889).

Regarding claim 1, Haacke ('889) teaches in figure 1A and the corresponding column and lines numbers, a high-pressure gas discharge lamp (1) with an asymmetrical discharge space (2) and/or an asymmetrical discharge vessel (12), wherein the bottom surface that is lowermost in the operational position of the lamp has raised central first portion which is surrounded by a relatively lowered second portion, whereby the discharge space (2) has a volume which is reduced by a given first factor in comparison with the volume of the discharge space of known mercury-containing discharge lamps, and wherein an obscuration of portions of the luminous discharge arc (6) and/or of portions of the electrodes (3) by light-generating substances not evaporated in the operational state is prevented in that the quantity of the light-generating substances in the discharge space (2) is reduced by a second factor which

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is determined in dependence on the value of the first factor and on the distance, defined

by the asymmetry, of the electrodes (3) to a bottom surface (10, 11) that is lowermost in

the operational position of the lamp, and wherein the volume of the discharge space is

approximately 18 micro-liters (read approximately 20 micro liters).

Alternatively, further regarding claim 1, Haacke ('889) does not disclose the

volume of the discharge space being exactly 18 micro liters.

However, it is the opinion of the examiner that the Haacke reference implies 18

micro-liters by the range "approximately 20 micro-liters". The values are so close as to

be considered to fall within the same range. The exact amount used is a matter of

obvious choice in design.

Hence, it would have been obvious to one of ordinary skill in the art at the time

the invention was made to use the disclosure of Haacke for the purpose of making a

lamp with improved efficiency. The exact volume of the discharge vessel is a matter of

obvious choice in design.

Regarding claim 2, Haacke ('889) teaches the discharge space (2) does not

contain mercury (see abstract "free from mercury").

Regarding claim 4, Haacke ('889) teaches the quantity of light-generating

substances is approximately 200 micro-grams (read "approximately 300 micro-grams",

same reasoning as for claim 1 above).

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Regarding claim 5, Haacke ('889) teaches the bottom surface comprises a first portion (10), which is raised by approximately 1 mm with respect to a surrounding second portion (11) (read "approximately 0.5 mm", same reasoning as for claim 1 above).

Regarding claim 6, Haacke ('889) teaches the discharge space (2) contains a rare gas.

Regarding claim 7, Haacke ('889) teaches the rare gas is xenon with a xenon cold pressure of between approximately 8 bar and approximately 20 bar.

Regarding claim 8, Haacke ('889) teaches a high-pressure gas discharge lamp as claimed in claim 1.

Regarding claim 9, Haacke ('889) teaches the xenon cold pressure is between approximately 10 bar and approximately 15 bar.

## Response to Arguments

2. Applicant's arguments filed 17 April 2007 have been fully considered but they are not persuasive.

Regarding amended claim 1, the Applicant has argued that the Haacke ('889) reference does not teach or suggest the volume of the discharge space is approximately 18 micro liters. The Examiner respectfully disagrees.

The key word, in both claim 1 of the present Application and the Haacke ('889) reference is "approximately". This term implies a range. Both the present Application and the Haacke ('889) reference use this term to describe the volume of the discharge

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space. The present Application provides no guidance as to what is to be include or excluded by the term "approximately". One of ordinary skill in the art would reasonably conclude that the volume could be a little more or less than 18 micro liters.

The same reasoning applies to the Haacke ('889) reference. The reference provides no guidance as to what is to be include or excluded by the term "approximately". One of ordinary skill in the art would reasonably conclude that the volume could be a little more or less than 20 micro liters.

It is the position of the Examiner that the Haacke ('889) reference meets the claim limitation because it implicitly discloses that the volume of the discharge space could be higher or lower than 20 micro liters. The volumes of 18 and 20 are so close as to be reasonable considered to fall within the term "approximately".

Regarding claims 4 and 5, the same reasoning applied to claim 1 above applies.

### Conclusion

3. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

### **Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph L. Williams whose telephone number is (571) 272-2465. The examiner can normally be reached on M-F (6:30 AM-3:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Joseph L. Williams Primary Examiner Art Unit 2879